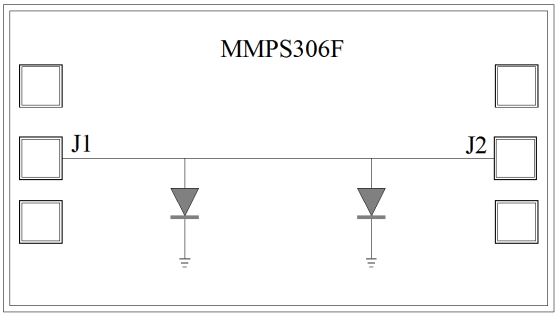
Features

- PIN Diode SPST Reflective design
- Frequency: 0.05-50GHz
- Isolation: 30dB Typical
- Insertion Loss: 0.8dB Typical
- Control Voltage:+5/-5V
- Switching Speed: 10ns Typical
- Die Size: 1.3 x 0.725 x 0.1 mm

Functional Block Diagram



Typical Applications

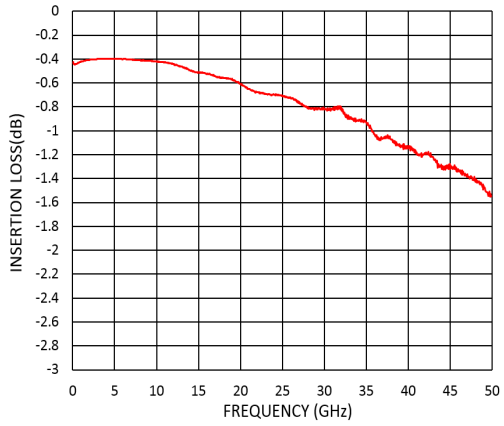
- Voltage control
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Electrical Specifications

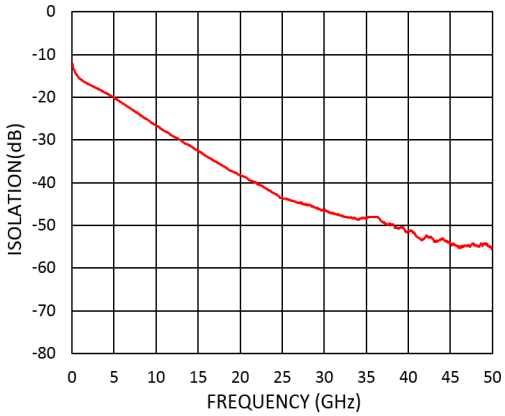
TA = +25°C, VCTL=+5/-5V , ±10 mA Typical

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency	0.05		26.5	26.5		50	GHz
Insertion Loss		0.8	1.0		1.5	1.8	dB
Isolation		30			50		dB
Input Return Loss (ON State)		18			16		dB
Output Return Loss (OFF State)		18			16		dB
P1dB - Output 1dB Compression		32			30		dBm
IIP3-Input Third Order Intercept		45			40		dBm
Switching Speed		10			10		ns

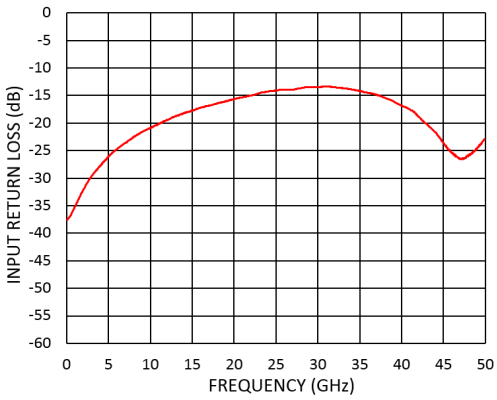
Insertion Loss vs. Frequency



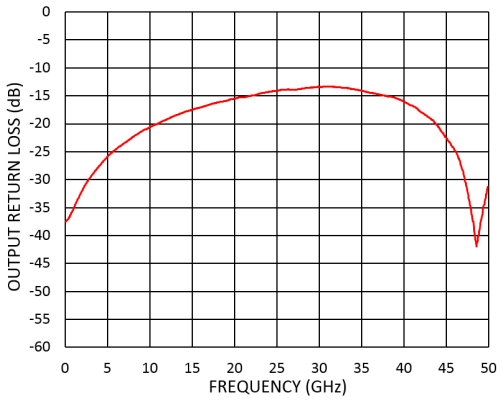
Isolation vs. Frequency



RL-On vs. Frequency



RL-On vs. Frequency

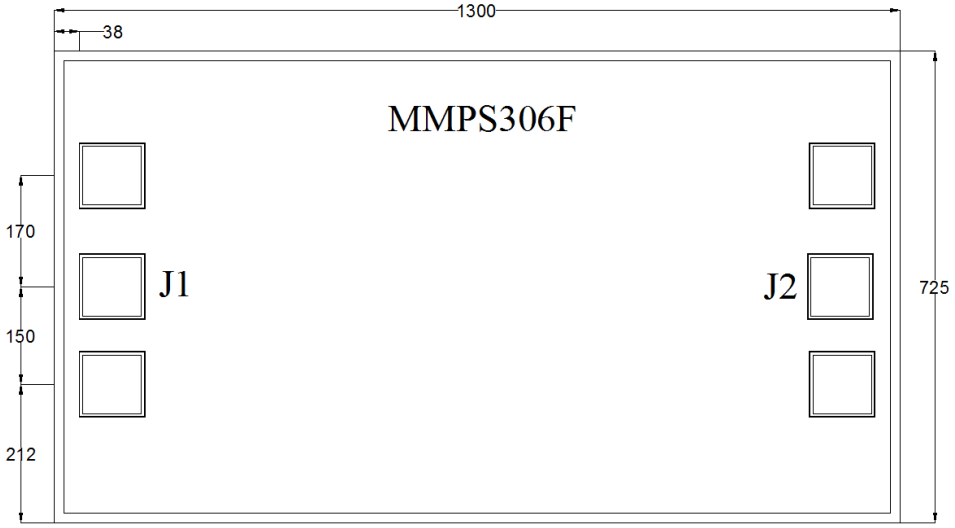


Absolute Maximum Ratings

Max Incident C.W. RF Power	+33dBm
DC Reverse Voltage	25V
Bias Current	±50 mA
Operating Temperature	-55°C to +85 °C
Storage Temperature	-65°C to +150 °C

ELECTROSTATIC SENSITIVE DEVICE
OBSERVE HANDLING PRECAUTIONS

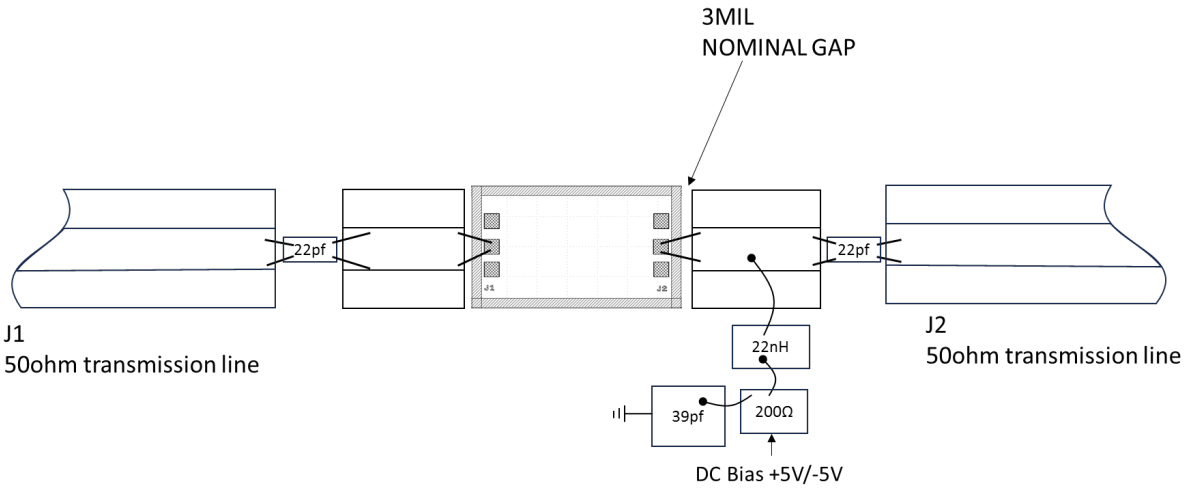
Outline Drawing:
All Dimensions in µm



True Table

Control Voltage	State
J2	J2→J1
-5V	ON
+5V	OFF

Assembly Drawing



Notes:

1. **Die thickness: 100µm**
2. **Typical bond pad is 100*100 µm²**
3. **Bond pad mentalization: Gold**
4. **Backside metallization: Gold**
5. **Backside of the die (GND)**
6. **No connection required for unlabeled bond pads**